REMARKS

We trust that the Examiner will now find the application to be in condition for allowance and reconsideration is respectfully requested. The examiner will first note that most of the 35 USC §112 claim rejections have been addressed. With regard to item 6, "the collected position" of claim 3 refers to claim 1, lines 5 and, "the position ... are determined and collected". With regard to item 8, "the positioning system" of claim 5 refers to claim 1, line 4. The Examiner's objection to the acronym "GPS" is noted. It is respectfully submitted that the acronym has become widely accepted as evidenced by virtually every car advertisement. Nonetheless, Applicant has inserted "(Global Positioning System)" into the specification to make clear what the acronym stands for.

The present invention relates to a method, system and a blade for monitoring the operation of a wind energy plant by use of position indicators positioned in predefined points on the blades of the plant wind turbines. This monitoring of the operation of a wind energy plant enables optimization of the operation and determination of deformations of a blade based on the absolute position of the position indicator positioned on the blade.

Claims 1-3, 5, 7, 8 and 10 were rejected as being anticipated by Rebsdorf (USP 6,619,918). As the Examiner acknowledges, Rebsdorf teaches the use of a strain gauge on the blade to measure mechanical loads which are used to calculate the positions of the blade tip. At best, this indirect measurement of the blade tip location is imprecise. Strain gauges are sensitive to wind gusts which will influence the calculation of the position of the blade tip possibly resulting in an incorrect position being obtained. In distinction, the present claims call for the use of "position indicators" which may, for example, be GPS sensors to provide a direct method for determining the blade tip position. GPS positioning, on the other hand, is precise and

becoming more precise and are relatively immune to environmental elements such as wind, lightning and the like.

The Examiner argues that Roberts (US 2003 0006615) teaches the use of GPS sensors as a means of location for a wind-driven generator and that it would be obvious to a person having ordinary skills in the art at the time the invention was made to modify the wind energy plant system and blades of Rebsdorf to use GPS sensors as position sensors, as taught by Roberts, in order to monitor the position of the blades because the modification amounts to a simple substitution of known, equivalent elements for tracking position which could be made by a person of ordinary skills with predictable results.

However, Roberts does not teach a method to determine the precise location of a specific point on wind turbine blades; actually, Roberts teaches about controlling flying electric generators which resemble helicopters. Also, the sensors mentioned in Roberts are means to determine the geographic position and altitude location relative to a ground frame of reference - not the position of a specific point on a wind turbine blade to optimize the operation of this wind turbine blade nor determination of deformations of a blade based on the absolute position of this specific point on the blade.

The Examiner further argues that Andersen (USP 6,940,185) discloses a wind energy system which has instruments, including position sensors, embedded in the turbine blades. It is respectfully submitted that what is taught by Andersen is an air control system coupled to a duct that extends from a first end toward a second end of the blade and a slot that extends along a portion of a surface of the blade and is in communication with the duct. Besides that, the system also comprises instruments to measure operational data and a controller that collects the operational data and compares the operating data to predetermined operating norms. Based upon

the comparison of the operating data and predetermined operating norms, the controller then actuates the air control system to urge pressurized air into the duct and out of the slot.

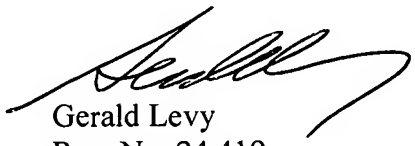
This is an indirect method to control the operation of wind turbines by determining the positions of specific points on a wind turbine, and not a direct method to determine a specific point on a wind turbine blade by use of position indicators as in the present invention.

The Examiner also argues that Donham (USP 4,297,076) discloses a wind turbine which has position indicators for individual blade elements. What is taught by Donham is a wind turbine where the tip of the blades is variable in pitch and where the position of the tip is controlled based on data collected from conventional strain gauges positioned on the blades.

Again, this is an indirect method to determine the position of the tip of a wind turbine blade, and not a direct method to determine a specific point on a wind turbine blade by use of position indicators as in the present invention.

In view of the above, it is respectfully submitted that the application as amended herein is in condition for allowance. A relatively early notification of allowance is respectfully requested.

Respectfully submitted,



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